

**Claims:**

1. A system for supplying power to multiple devices, the system comprising:

5           a first device receiving power over a first Power over Ethernet (PoE) connection; and

          one or more downstream devices receiving power from the first device, wherein the first device supplies at least a portion of the power received over the first PoE connection to at least one of the one or more downstream devices.

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2. The system of claim 1, further comprising a power device connected to the first device and supplying power to the first device over the first PoE connection.

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3. The system of claim 1, wherein the first device includes a power repeater.

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4. The system of claim 3, wherein the power repeater is connected to the first device.

5. The system of claim 3, wherein the power repeater is implemented within the first device.

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6. The system of claim 3, wherein the power repeater comprising one of an Ethernet hub or an Ethernet switch.

5 7. The system of claim 3, wherein the one or more downstream devices are connected to the first device in a hub-and-spoke configuration with the first device comprising the hub in the hub-and-spoke configuration, and wherein the power repeater supplies at least a portion of the power received over the first PoE connection to all of the downstream devices over a PoE connection  
10 associated with each downstream device.

8. The system of claim 3, wherein the one or more downstream devices are connected to the first device in a linear configuration, and wherein the power  
15 repeater supplies at least a portion of the power received over the first PoE connection to a first downstream device over a PoE connection between the first device and the first downstream device.

20 9. The system of claim 8, wherein each downstream device supplying power to a subsequent downstream device includes a power repeater that supplies power using respective PoE connections.

10. A system for supplying power to multiple devices, comprising:

a power device;

5 a plurality of powered devices each connected to the power device using a Power over Ethernet (PoE) connection and receiving power from the power device over the PoE connection; and

10 one or more downstream devices each connected to a respective powered device using a PoE connection and receiving at least a portion of the power received by the respective powered device over the PoE connection.

11. The system of claim 10, wherein each powered device in the plurality of  
15 powered devices includes a power repeater.

12. The system of claim 11, wherein at least one of the power repeaters is  
20 connected to a respective powered device.

13. The system of claim 11, wherein at least one of the power repeaters is  
implemented within a respective powered device.

25 14. The system of claim 11, wherein each power repeater comprises one of an Ethernet hub or an Ethernet switch.

15. A method for supplying power to multiple devices, comprising:

providing power over a first Power over Ethernet (PoE) connection;  
and

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providing power over one or more downstream PoE connections,  
wherein the power provided over the one or more downstream PoE  
connections comprises at least a portion of the power provided over the first  
PoE connection.

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